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11      5' TCGAG CCG ATT CGG CTC GAG CGG CTC GAG CTC AGT TAG GAC CCA GAG GGA ACC ATG 56
          M

65      74      83      92      101      110
GAA GCC CCA GCT CAG CTT CTC TTC CTC CTA CTC TGG CTC CCA GAT ACC ACC 110
E  A  P  A  Q  L  L  F  L  L  L  L  L  W  L  P  D  T  T

119      128      137      146      155      164
GGA GAA ATT GTG TTG ACA CAG TCT CCA GCC ACC CTG TCT TTG TCT CCA GGG GAA 164
G  E  I  V  L  T  Q  S  P  A  T  L  S  L  S  P  G  E

173      182      191      200      209      218
AGA GCC ACC CTC TCC TGC AGG GCC AGT CAG AGT GTT AGC AGC TAC TTA GCC TGG 218
R  A  T  L  S  C  R  A  S  Q  S  V  S  S  Y  L  A  W

227      236      245      254      263      272
TAC CAA CAG AAA CCT GGC CAG GCT CCC AGG CTC CTC ATC TAT GAT GCA TCC AAC 272
Y  Q  Q  K  P  G  Q  Q  A  P  R  L  L  I  Y  D  A  S  N

281      290      299      308      317      326
AGG GCC ACT GGC ATC CCA CCC AGG TTC AGT GGC AGT GGG TCT GGG ACA GAC TTC 326
R  A  T  G  I  P  P  R  F  S  G  S  G  S  G  T  D  F

335      344      353      362      371      380
ACT CTC ACC ATC AGC AGA CTG GAG CCC GAA GAT GTG GCA CTT TAT TAC TGT CAG 380
T  L  T  I  S  R  L  L  E  P  E  D  V  A  L  Y  Y  C  Q

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FIGURE 1A

389 CAA TAT TTT ACT ACT CCG TAC ACT TTT GGC CAG GGG ACC AGG CTG GAG ATC AAA 434
 Q Y F T T P Y T F G Q CAG GGG ACC AGG CTG GAG ATC AAA K
 443 CGA ACT GTG GCT GCA CCA TCT GTC TTC ATC TTC CCG CCA TCT GAT GAG CAG TTG 488
 R T V A A P S V F I F P P P S D E Q L
 497 AAA TCT GGA ACT GCC TCT GTT GTG TGC CTG CTG CTG AAT AAC TTC TAT CCC AGA GAG 542
 K S G T A S S V V C L L L N N F Y P R E
 551 GCC AAA GTA CAG TGG AAG GTG GAT AAC GCC CTC CAA TCG GGT AAC TCC CAG GAG 596
 A K V Q W K V D N A L Q CAA TCG GGT AAC TCC CAG GAG E
 605 AGT GTC ACA GAG CAG GAC AGC AAG GAC AGC ACC ACC AGC CTC AGC AGC ACC CTG 650
 S V T E Q D S K D S T Y TAC AGC CTC AGC AGC AGC ACC CTG L
 659 ACG CTG AGC AAA GCA GAC TAC GAG AAA CAC AHA CAC AAA GTC TAC GCC TGC GAA GTC ACC 704
 T L S K A D Y E K H K V V Y A C C E V T
 713 CAT CAG GGC CTG AGC TCG CCC GTC ACA AAG AGC TTC AAC AGG GGA GAG TGT TAG 758
 H Q G L S S P V T K S S F N R G E C

FIGURE 1B

767	776	785	794	803	812
AGG GAG AAG TGC CCC CAC CTG CTC AGT TCC AGC CTG ACC CCC TCC CAT CCT					
821	830	839	848	857	866
TTG GCC TCT GAC CCT TTT TCC ACA GGG GAC CTA CCC CTA TTG CGG TCC TCC AGC					
875	884	893	902	911	920
TCA TCT TTC ACC TCA CCC CCC TCC TCC TCC TTA ATT ATG CTA ATG TTG					
929	938	947	956		
GAG GAG AAT GAA TAA ATA AAG TGA ATC TTT GCA AAA AAA AAA 3'					

FIGURE 1C

5' CGGG GCT AGC CCG GAG ACC CGG CCA CCG GCC TGG GGC GCC TTC ACG CCG TCT CGG 55
 64 AGC GGA TAA TGC GGT GAG CAG GCA CCA CGC CGG CAG ACT CGG CTG GAT CTG CGC 109
 118 ACA GCG GCA GGG ATT GCG TGC TGC GCC CGC GGG AGG CCC GGG GCA GCG GCT GGG ATC 163
 172 CTC AGC GGC GGC CGG TTT GTC CTG GTT GTG GTC AAG ACT GGA TGA TGT AAC TGG 217
 226 CTC TCT AGG AAG CCT CAC TTG GCC GTA ACC TCA GGA AGG TTC TCT TTG ACC CCA 271
 280 TCT CAT TTC GAA GCC ACT TCT GAA GCC ACT TGA GAA AAA TGA TGT GAC AGT TCC 325
 334 TAT CAA AAA GGA TTC AGA AAC ATA TAC CAT CAT CTG TGA AGA AAG TGG CCC TTT CTC 379
 388 CCG CTT GCA AAA TAG ACA TTC TCA AAT TCC AAA ATG CCA GCC AAG ACC CCA ATT 433
 M P A K T P I

FIGURE 2A

442 TAC CTG AAA GCA GCC AAT AAC AAG AAA GGA AAG AAA TTT AAA CTG AGG GAC ATT 487
 Y L K A A N N K K K G K K F K L R D I
 496 CTG TCT CCT GAT ATG ATC AGT CCC CCG CTT GGA GAC TTT CGC CAC ACC ATC CAC 541
 L S P D M I S P P P L G D F F R H T I H
 550 ATT GGC AAA GAG GGC CAG CAC GAT GTC TTT GGA GAT ATT TCC TTT CTT CAA GGG 595
 I G K E G Q H D V F G D I S F L Q G
 604 AAC TAC GAG CTT TTA CCT GGA AAC CAG GAG AAA GCA CAC CTG GGC CAG TTC CCT 649
 N Y E L L P G N Q E K A H L G Q F P
 658 GGG CAT AAT GAG TTC TTC CGG GCC AAC AGC ACC TCG GAC TCT GTG TTC ACA GAA 703
 G H N E G F F R A N S T S D S V F T E
 712 ACG CCC TCC CCG GTG CTC AAA AAT GCC ATC TCC CTC TCC CCG ACC ACC ATT GGA GGA TCC 757
 T P S P V L K N A I S L L P P T I G G S
 766 CAA GCT CTC ATG TTG CCC TTA TTG TCA CCA GTG ACA TTT AAT TCC AAA CAG GAG 811
 Q A L M L P L L S P V T F N S K Q E

FIGURE 2B

820 TTC GGG CCA GCA AAG CTG CCC AGG CTT AGC TGC GAG CCC GTC 856 865
 S F G P A K L P R L S C E P V M E E
 874 AAA GCT CAG GAG AAA AGC AGT CTG TTG GAG AAT GGG ACA GTC CAC CAG GGA GAC 919
 K A Q E K S S L L E N G T V H Q G D
 928 ACC TCG TGG GGC TCC AGC GGT TCT GCA TCT CAG TCC AGC CAA GGC AGA GAC AGC 973
 T S W G S S G S A S Q S S Q G R D S
 982 CAC TCC TCC AGC CTG TCC GAA CAG TAC CCC GAC TGG CCA GCC GAG GAC ATG TTT 1027
 H S S L S E Q Y P D W P A E D M F
 1036 GAC CAT CCC ACC CCA TGC GAG CTC ATC AAG GGA AAG ACT AAG TCA GAG GAG TCC 1081
 D H P T P C E L I K G K T K S E E S
 1090 CTC TCT GAC CTT ACA GGT TCC CTC CTC TCC CTG CAG CTT GAT CTT GGG CCC TCA 1135
 L S D L T G S L L L S L Q L D L G P S
 1144 CTT TTG GAT GAG GTG CTG AAT GTA ATG GAT AAA AAT AAG TAA CAA GAT GCC AAC 1189
 L L D E V L N V M D K N K

FIGURE 2C

1198 1207 1216 1225 1234 1243
TTT CCT TTG GGG TAA AAG GTA CAA AAA CAA ACT AAC CAC AGT TGA AGA GAA

1252 1261 1270 1279 1288 1297
GGG CTT CCG GAG CTG TAT TTG CAG TTT TGT GTT GGG TTT TCT AAA ATA ATA TTC

1306 1315 1324 1333 1342 1351
TTA CAA AGT ATT TTT TTA CCT GTT ATG CCC TGT TTG CAA AAA CAA TTT AGA AAA

1360 1369 1378 1387 1396 1405
AAA CAA CAA AGC AAA ACC TAT CTT GGC AAA AAA AGG AAG TGA GTC AGA GCC CAT

1414 1423 1432 1441 1450 1459
TTT CAG GAG GCA TTG GTG ATG TTC GGC TCA CAT ATT GTT TGC AGA CAC ACA AGA

1468 1477 1486 1495 1504 1513
AAT CTG GCT TGG CCA GGA TTG GCA CTA GCT ATG AAG GGC TGA GCG AGT CAC ATT

1522 1531 1540 1549 1558 1567
AAG GAA CTT CAC GGA ACT TTA TAG CAC TCC GAC ATT TTC TGA GCA AGA GGA AGT

1576 1585 1594 1603 1612 1621
CAA AAT TTA TTT AAC ACC TAA GCC TTT TTG TAG ACT CTT TTC TAT ATA TTG CTT

1630 1639 1648 1657 1666 1675
AGG CTC ACC ATA GCG AAT TCT CCA GTG TTA AAA CTT TTC TGT TTT CAC ATT TGA

FIGURE 2D

8/11

1684	1693	1702	1711	1720	1729
ACT TTA TGG GTT	TTG GGG ATT	TTC TTG TAG	TTC TTA TAT	ATC CCT ATA	TAT TAT
1738	1747	1756	1765	1774	1783
ATC TAT ATT	GCA AAA TTT	TGA CTG TCA	GCT ACA TGT	TGG TAA GAC	ACA GGC AAA
1792	1801	1810	1819	1828	1837
GTA TTA CTG	TAA CTA AGT	TAT TTT TAA	AGT TAA AAT	ATA TTT TTA	CGT GCC TTT
1846	1855	1864	1873	1882	1891
GGC TTT TTA	TTG CAG AGT	CTA CAT TTT	ATA GAT TCT	ACA TCA GAT	GTT GTC ACT
1900	1909	1918	1927	1936	1945
TAT TTC CAT	TGG GAT TCC	ATT GTA AGC	TGT GTA TGT	GCG TGT TTG	GAA AAG TGT
1954	1963	1972	1981	1990	1999
ATT CAT ACT	TAG TTT TTT	TTT CTT CAT	CTG TTA TCA	TAC TTT TAA	CAG CAA CCA
2008	2017	2026	2035	2044	2053
ATA ACG GAT	TGT AAA GTG	TAA AGG CAC	AGG TTA CTC	ATG ATG CTT	CTG CAG AGA
2062	2071	2080	2089	2098	2107
CTG TGG GCT	ACA CCA CAT	ATG TTA TTT	GGA AAT ATA	GGT ATT TTA	GTA CAG TAC
2116	2125	2134	2143	2152	2161
ATA CTT GCA	TTA CAT AGG	TAC TTC AAG	CAA CAC AAT	AAA AAG TAA	ATG ATA AAG

FIGURE 2E

2170 TGA ACT TGC TTG TTT ATA GTA ATA AAC AAG ACC ATA AGA GAA TAA GTA TAG CTA 2215
2224 GAG AAA TTG CTT CTC TGA AAT GTA CAT GAG CCC TTA AGG TAA GAG ATG ATT TCC 2269
2278 ATC TAC TCT CAT TTT GAT TAC TTC CTT ATG GTT TGA GAG GCT AGA AAC TGA GCC 2323
2332 TCT CTA CTT TTG GAA AAA TGA ACA TGT GAG GTC AGA TTT TTT TTT TTT TTA 2377
2386 AGT CAG CAC TGA TGC CAC CCT CTC AGT GGT CAT TTC TGA GCA TCT TCC TGA CTT 2431
2440 GAA CAC CTT CTA CAG CAA ACT CTT GCA AGT CCA GTT TCA TCC CTG TAA GGC AAA 2485
2494 TGT CTT TTC ACG CAG AAA GTG CCA TAT AGA CGA GAT AAA GGC AGC TAN AAC GAG 2539
GCC AGT A 3'

FIGURE 2F

1 M P A K - - - - - T P I Y L - K A A N N K K G K K F K L R 1859631
 1 M P G P Q G G R G A A T M S L G K L S P V G W V S S S Q G K G I 338033
 24 D I L S P D M I S P P L G D F R H T I H I G K E G Q H D V F 1859631
 31 R R L T A D M I S H P L G D F R H T M H V G R G G - - D V F G I 338033
 54 G D I S F L Q G N Y E L L P G N Q E K A H L G Q F P G H N E 1859631
 59 G D T S F L - S N H G G S S G S T H R S P R S F L A K K L Q G I 338033
 84 F F R A N S T S D S V F T E T P S P V L K N A I S L P T I G 1859631
 88 L V R R V G A P P R R M A S P P A P S P A P A I S P I I - G I 338033
 114 G S Q A L M L P L L S P V T F N S K Q E S F G P A K L P R L 1859631
 117 - K N A I S L P Q L N Q A A Y - - - - D S L V V G K L S - F G I 338033

FIGURE 3A

144 S C E P V M E E K A Q E K S S L L E N G T V H Q G D T S W G 1859631
141 D S S P T S S T D G H S S Y G L - D S G F C T I S R L P R - GI 338033

174 S S G S A S Q S S Q G R D S H S S S L S E Q Y P D W P A E D 1859631
169 - - - - S E K P H D R D R D G S - - - - F P S E P - - - GI 338033

204 M F D H P T P C E L I K G K T K S E E S L S D L T G S L L S 1859631
186 - - - - - - - - G L R R S D S L L S - - - - - F R GI 338033

234 L Q L D L G P S L L D E V L N V M D K N K
198 L D L D L G P S L L S E L L G V M S L P E 1859631
GI 338033

FIGURE 3B